

CLAIMS

1. Powered test-tube agitation device including a plate (12) having a rest (13) for a test tube to be agitated and a powered mechanism (15) operating the plate (12) in agitation, characterized in that the device comprises an optical detection means (17, 117) for optical detection of the entry of an object into a predetermined zone above the plate (12), the optical detection means (17, 117) being operatively connected to the powered mechanism (15) to activate operation thereof.
2. Device in accordance with claim 1, characterized in that the optical detection means includes a photoelectric reflection detection device (17).
3. Device in accordance with claim 2, characterized in that the photoelectric reflection detection device includes an infrared emitter (17a) and an infrared receiver (17b) arranged close to the side of said plate (12).
4. Device in accordance with claim 1, characterized in that the optical detection means includes a barrier photoelectric detection device (117a, 117b).
5. Device in accordance with claim 1, characterized in that the optical detection means (17, 117) activates the powered mechanism (15) with a predetermined delay.
6. Device in accordance with claim 5, characterized in that the delay is between 10 ms and 1 s and preferably 100 ms.
7. Device in accordance with claim 1, characterized in that the powered mechanism (15) is started with a predetermined

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ramp of increase in the frequency and/or amplitude of the plate agitation movement.

8. Device in accordance with claim 2, characterized in that the photoelectric reflection detection device (17) is
5 arranged in front of the rest (13) and turned towards the rear of the device.